What is Organic Pollution?

The term refers to pollution that can result from organic waste - waste generated by or derived from plants and animals. It is often naturally occurring, but can still be polluting to the aquatic environment. A wide variety of activities generate organic waste.

Type of Activity	Example of Type of Waste
Gardening	Green waste (grass clippings, cuttings etc)
Food and drink preparation and processing	Milk, beer, left-over food, bin cleaning
Animal Housing	Horse manure and muck heaps, kennel and cattery waste
Agriculture and Horticulture	Green waste, slurry, silage, milk

What are the effects?

If organic waste is stored or used correctly it should not cause water pollution. Leachate is the liquid waste that is produced as organic waste decomposes. If leachate enters a stream, it can be extremely polluting. Naturally occurring bacteria in the stream will break down the waste quickly using oxygen in the water. As the oxygen levels fall, aguatic life in the stream will die. Pollution from organic waste can also have a dramatic impact on you. It can lead to water in streams, reservoirs, boreholes and wells being unfit for uses such as human and livestock drinking and crop irrigation.

Remember

Causing or knowingly permitting pollution of controlled waters is an offence under the Water Pollution (Jersey) Law, 2000. There are however strong defences that may be available to persons acting in a responsible manner. A copy of the law can be obtained from the States Greffe bookshop or it can be viewed at www.jerseylaw.je

Information for this leaflet has been obtained from the Environment Agency, UK.

Organic Pollution Prevention Checklist

- Small amounts of organic waste can be assimilated into the environment. It is where activities or wastes are concentrated that problems can occur.
- Assess your land or property in terms of the risk of causing water pollution from the waste or products being used or stored. Are there any surface water drains and watercourses in the area?
- Whatever the source of organic waste, the risk of causing pollution can be minimised by ensuring good design, construction and maintenance of storage
- Any leachate or dirty water should be collected and disposed of in the correct manner. Some liquid waste may be accepted into the foul sewer network by arrangement with Transport and Technical Services Tel: 445509. It may also be possible to spread it to land.
- The Water Pollution (Code of Good Agricultural Practice) (Jersey) Order 2004 provides comprehensive guidance on good practice for agricultural and horticultural activities.
- As a general principle organic waste should not be stored or applied to land within 10m of a field drain, surface water drain or watercourse or within 50m of a borehole, spring or well.
- The risk of organic waste causing pollution when stored or spread on land is increased under certain conditions that increase the likelihood of any liquid running off into drains or watercourses. These include applying waste when land is frozen, compacted, saturated or steeply sloping. Additionally, there is a high risk of pollution occurring if waste is spread to fields that have improved drainage.

Water **Pollution Hotline** Tel: 709535

ENVIRONMENTAL PROTECTION, ENVIRONMENT DIVISION, PLANNING AND ENVIRONMENT DEPARTMENT

organic waste

and the aquatic environment



- Food and drink preparation and processing
- Animal Housing
- Agriculture and Horticulture



Preventing Organic Pollution

Gardening

- The green waste generated by gardening and some kitchen waste can be composted at home and then used as a soil conditioner. Composting bins are available at most garden centres for this purpose.
- Compost needs a mix of 'greens' and 'browns' to get the right ratio of nutrients and moisture. Dried flowers, woody stems, fallen leaves and cardboard (browns) are high in carbon and do not contain much moisture; Vegetable peelings, fruit waste, teabags, plant prunings and fresh grass cuttings (greens) are high in nitrogen and moisture. Don't compost meat, bones, fish, dairy products, cooked food or cat/dog litter or faeces.
- Alternatively, garden waste can be taken to the Island's composting site, which is administered by Transport and Technical Services Tel: 445509.

Food and drink preparation and processing and commercial bin stores

- Liquids such as milk or fruit juice may seem harmless but can be highly polluting. Milk that enters a watercourse is broken down by bacteria which consume oxygen more quickly than it can be replaced. As a result of falling oxygen levels, fish and other creatures can suffocate. Fruit juice is often highly acidic and can also de-oxygenate a watercourse.
- Waste from food and drink preparation, from restaurants and retail stores should be collected, stored and disposed of correctly. Small amounts can be safely stored in individual watertight bins.
- Refuse or rubbish storage areas should be under cover and isolated from surface drains using drainage falls or raised kerbs.
- Water generated from washing of bin storage areas should be disposed of to the foul drainage system, and not allowed to enter surface water drains. Companies wishing to discharge a liquid effluent into the foul sewer should contact Transport and Technical Services for advice and permission Tel: 445509.

Animal Housing

- In small quantities animal waste can be assimilated into the environment without causing harm – for example dung and soil bacteria break down faeces deposited by grazing animals and the nutrients released can be beneficial to plants. However, in large quantities or when highly concentrated it can cause serious pollution to ground and surface water.
- The liquid and solid waste arising from stables, kennels and catteries can be highly polluting – the design of the buildings and day to day management of the facilities should be planned to prevent pollution.
- Solid waste must be stored in a way that reduces the risk
 of pollution arising from leachate. For example, a muck
 heap should be sited on a concrete base and kept
 covered to help prevent the formation of leachate.
 Ideally, it should be at least 10m from any watercourse
 and 50m from any borehole or well.
- Liquid waste and any leachate generated from solid waste should be contained and disposed of correctly e.g. water from hay soaking, washing of housing and run off from dirty yards. Liquid waste may be accepted into the foul sewer by prior arrangement with Transport and Technical Services Tel: 445509. Where no mains drains are available, consider whether the liquid could be spread to land or tankered out. If it is discharged to a private treatment system advice should be obtained from Environmental Protection on how to apply for a discharge permit under the Water Pollution (Jersey) Law, 2000 Tel: 441600.
- Clean water from roofs or uncontaminated areas should not be allowed to mix with dirty water. Down pipes from roofs should have sealed connections to surface water drains.

Manure heaps should be located where there is no risk of run off causing pollution.



Agriculture and Horticulture

Organic wastes such as silage effluent, slurry and dirty water arising from farms can have a devastating effect on the aquatic environment. The BOD (Biochemical Oxygen Demand - a measure of the amount of oxygen required to break down organic material) of these substances can be 200, 50 and 12 times higher respectively than that of raw, untreated sewage. As a result of falling oxygen levels, fish and other creatures can suffocate.

Further Information and Assistance

- The Code of Good Agricultural Practice for the Protection of Water ('The Water Code'), Jersey, March 2004 is an approved code of practice under the Water Pollution (Jersey) Law, 2000. It provides detailed advice on measures to prevent pollution from agricultural and horticultural activities.
- Environment Division advisors can assist with the production of an individualised Farm Manure and Waste Management Plan Tel: 441600.
- The Countryside Renewal Scheme offers support and financial assistance to those who wish to produce and implement an Environmental Plan. The scheme is available to both practicing farmers as tenants, owner occupiers and landowners who are not actively involved in farming, which means that natural, un-farmed areas of land are also eligible. The Environmental Plan comprises a choice of scheme components, designed to prevent pollution, increase bio-diversity, enhance the landscape, increase access to the countryside, improve energy efficiency and encourage less intensive farming practices. Components that support pollution prevention include the introduction of buffer and habitat strips; the creation of grassland and cover crops and slurry and dirty water management (the aim is to increase slurry storage capacity to four months). Contact the Environment Division for further details and application forms Tel: 441600.